

CLAIMS

1. A method of controlling writing of a signal to an optical disc and including the step of generating a feedback signal to dynamically tune the
5 source of the said signal, and further comprising the steps of generating a plurality of timing signals serving to define the plurality of sampling windows for selecting data samples from RF signals derived from the signal reflected from the disc, generating a plurality of runlength selection signals to allow for measurement of light reflection at required runlength lands or pits, and
10 measuring light reflected at a runlength land or pit in processing means and employing the measured signal as the said feedback signal for the said tuning of the signal source.
2. A method as claimed in Claim 1, wherein the width and/or positions of
15 the sampling windows are programmable.
3. A method as claimed in Claim 1 or 2, wherein the said RF signals are selected when the runlength signal is high.
- 20 4. A method as claimed in Claim 1, 2 or 3, wherein the runlength selection window comprises the current plus next runlength land or pit.
5. A method as claimed in Claim 1, 2 or 3, wherein the runlength selection window comprises the previous plus current runlength land or pit.
25
6. A method as claimed in any one or more of the proceeding claims, wherein the sampling rate of the said RF signals is at least equal to the frequency of a system channel clock.
- 30 7. A method as claimed in any one or more of Claims 1-6, wherein the RF sample signals are selected by means of the timing signals within a sample engine.

8. A method as claimed in any one or more of Claims 1-7, and including the step of low pass filtering the sampled signals.
9. A method as claimed in Claim 8, and including the step of calculating
5 slope and offset values on the basis of the low pass sampled signals.
10. A method as claimed in any one or more of the proceeding claims, wherein the feedback signal is arranged for fine-tuning the Write Strategy associated with a DVD writable device.
- 10 11. A method as claimed in any one or more of the proceedings claims and including the step of adopting a threshold value serving to determine which of the sampled signals initiate the said measurement.
- 15 12. A method as claimed in Claim 11, wherein the selected threshold can be tuned.
13. A method as claimed in any one or more of the Claims 1-12, wherein the feedback signal is arranged to fine-tune laser output power of a optical disc
20 writing device.
14. A write signal control apparatus arranged for controlling writing of data to an optical disc and comprising means for generating a feedback signal for dynamically tuning the source of the said signal, means for generating a
25 plurality of timing signals serving to define a plurality of sampling windows, means for selecting data samples for RF signals derived from a signal reflected from the disc, means for generating a plurality of runlength selection signals arranged to allow for measurement of the reflection at a runlength land or pit, and processing means for measuring the reflected signal at the
30 runlength land or pit, wherein the said measured signal serves as the said feedback signal for tuning the said signal source.

15. Apparatus as claimed in Claim 14, wherein the width and/or positions of the sampling windows are arranged to be programmable.

16. Apparatus as claimed in Claim 14 or 15, wherein signals from the RF
5 analogue-to-digital converter are arranged to be selected when the runlength signal is high.

17. Apparatus as claimed in Claim 14, 15 or 16, wherein the runlength
10 selection window comprises the current plus next runlength land or pit.

18. Apparatus as claimed in Claim 14, 15 or 16, wherein the runlength
selection window comprises the previous plus current runlength land or pit.

19. Apparatus as claimed in any one or more of the proceeding claims,
15 wherein the sampling rate of the said RF is at least equal the frequency of a system channel clock.

20. Apparatus as claimed in any one or more of Claims 14-19, and
20 including a sample engine in which the said RF sample signals are selected by means of the timing signals.

21. Apparatus as claimed in any one or more of Claims 14-20, and
including low pass filter means arranged for low-pass filtering the sampled
25 signals.

22. Apparatus as claimed in Claim 21, and including means for calculating
slope and offset values on the basis of the low pass sampled signals.

23. Apparatus as claimed in any one or more of Claims 14 to 22 and
30 including means for defining a threshold value serving to determine which sampled signals is employed in the said measurement.

24. Apparatus as claimed in Claim 23, wherein the selected threshold can be tuned.

25. A method of controlling writing of a signal to an optical disc
5 substantially as hereinbefore described with reference to, and as illustrated in the accompanying drawings.

26. Write signal control apparatus arranged for controlling writing of a data
to an optical disc and substantially as hereinbefore described with reference
10 to, and as illustrated in the accompanying drawings.